

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS : Jouko Savolainen et al.  
TITLE : **METHOD FOR PREPARING FILM  
COATINGS AND FILM COATING**  
APPLICATION NO. : 10/575,400  
FILED : April 7, 2006  
CONFIRMATION NO. : 8987  
EXAMINER : Marsha M Tsay  
ART UNIT : 1656  
LAST OFFICE ACTION : June 19, 2009  
ATTORNEY DOCKET NO. : LOYZ 2 00005

MAIL STOP AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION UNDER 37 CFR 1.132**

Dear Sir:

I, Jouko Savolainen [and/or another one of the three inventors], do declare as follows:

1. I am one of the inventors in the above-captioned patent application.
2. Educational background  
Secondary school graduate/High school graduate 1959  
Master of Science, microbiology, University of Helsinki 1967  
Licentiate of Science, microbiology & food chemistry, University of Helsinki  
1971.  
Master of Science, microbiology, University of Wisconsin, Madison Wis.  
USA. 1973.

3. Work history

Teaching and research assistant, University of Helsinki, 1965-71

Kellogg foundation fellow, Madison, Wisconsin, USA 1971-73

Fermion Oy Ltd, researcher, enzymatic methods in penicillin modification  
1973-1975.

Orion Diagnostica, project manager, diagnostic devices for rotavirus and  
Streptococcus mutans detection as well as oral vaccine for E. coli  
diarrhoea in weaning piglets 1975-1983.

Suomen Sokeri Oy Ltd, research microbiologist, production of glucose  
isomerase and gluconic acid and development of itaconic acid production,  
1983-1985.

EKE-yhtiöt/companies Oy Ltd, biotechnology specialist in the projects for  
Soviet Academies 1985-87

Research Center of Meat Industry, manager in biotechnology  
projects 1987-1992.

Uniq Bioresearch Oy Ltd, founder and CEO 1993-

4. Publications

Vuori, A., Savolainen, J. & Gyllenberg, H.G. 1969 Cell crops and  
composition of carotens and proteins of Rhodotorula yeasts. Acta Agric.  
Scand. 19, 141-148.

Savolainen, J.E.T., Vuori, A.J. & Gyllenberg, H.G. 1970 Pilot plant  
experiments on the propagation and harvesting of Rhodotorula sanneii.  
Acta Agric. Scand. 19, 221-228.

Savolainen, J.E.T. & Gyllenberg, H.G. 1970 Feeding of rainbow trouts with  
Rhodotorula sanneii preparation. III Amounts and qualities of carotenoids.  
Food Sci. Technol. 3, 18-20.

Savolainen, J.E.T., Honkanen-Buzalski, T. & Vasenius, A.H. 1979 The  
effect of oral Escherichia coli vaccination on growth rate of piglets.  
Presented at the XXI World Veterinary Congress, Moscow July 1-7, 1979.

Savolainen, J.E.T. & Honkanen-Buzalski, T. & Vasenius, A.H. 1980  
Variation of the effect of oral vaccine on the piglets on some farms.  
Presented at the Third International Congress of Animal Hygiene in Vienna  
10-12 Sept. 1980

Julkunen, I., Savolainen, J., Hautanen, A., von Bonsdorff, C-H. & Hovi, T. 1985 Detection of rotavirus from stools by electron microscopy, enzyme immunoassay and latex agglutination. Scand. J. Infect. Dis. 17, 245-249.

Alaluusua Satu, Savolainen Jouko, Tuompo Helena, and Grönroos Lisa 1984 Slide-scoring for estimation of Streptococcus mutans levels in saliva. Scand. J. Dent. Res., 92, 127-133.

Savolainen, J.E.T. 1991 Detection of irradiation of some ingredients used in processed foods. BCR Workshop "Recent advances of new methods of detection of irradiated food." Portonovo di Ancona, Italy, September 24-26, 1991.

Kananen, A., Savolainen, J., Mäkinen, J., Perttilä, U., Myllykoski, L. & Pihlanto-Leppälä, A. 2000 Influence of chemical modification of whey protein conformation on hydrolysis with pepsin and trypsin. Int. Dairy J. 10, 691-697.

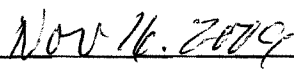
5. I am familiar with the subject matter in this patent application.
6. I have reviewed the Office Action dated June 19, 2009.
7. I have also reviewed U.S. Patent No. 6,797,810 to Savolainen.  
I understand the Examiner's contention on page 4 of the Office Action that the protein film of claims 1, 2, 4, and 5 of the present application were inherently formed in Examples 1 and 4 of the '810 patent.
8. It is my opinion that such a protein film would not be inherently formed.  
A protein film can be formed by using activated/modified soluble whey protein fraction or blend of modified and unmodified protein in solution. There in solution has to be also a plasticizer mainly a polyalcohol to keep the film flexible. The film will be formed without heating but heating will improve e.g. the mechanical strength.  
The solution is poured onto even surface e.g. into Petri dishes as thin layer and it was allowed to dry e.g. at 22°C/ RH 45% for at least 22 hours. After drying the film was carefully peeled from dishes.
9. The '810 patent has eight examples. When reducing to practice the subject matter of the '810 patent, we had tested the compositions described in those eight examples to see if film was formed.

No film formation was detected at that time.

At that time our purpose was to prepare modified whey protein and two fractions without sulfide. Film formation was not in mind and no film formation occurred. If something like that has happened which is necessary for film formation it were gelling. Gel formation occurred only once when control of pH failed and pH increased up to over 8.

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

  
Jouko Savolainen

  
Date